

Modifications to the identification key in the *Field Guide to the Sedges of the Pacific Northwest*, as of August 24, 2009.

Key A. (We have been informed of dioecious *C. nigricans* populations in Montana; they cannot be identified using this key.)

Key A1, p. 40.

5a. Leaves 2.8 – 4 mm wide; substrate serpentine *C. scabriuscula*

5b. Leaves <3 mm wide; substrate serpentine or not

..... *C. scirpoidea* ssp. *pseudoscirpoidea*

Key A5, p. 42.

2a. Culms cylindric or rounded-triangular; leaves inconspicuous, involute, and narrow, 0.8 – 1.5 mm wide (or about 2 mm wide if unrolled and flattened), shorter than the culms; perigynia with several faint veins in addition to 2 strong ribs; plants densely cespitose; range SW OR *C. multicaulis*

2b. Culms obviously triangular; leaves conspicuous, flat, 1.1 – 3.5 mm wide, +/- equalling or exceeding the culms; perigynia veinless except for 2 strong ribs; plants loosely cespitose to short-rhizomatous; range various *C. geyeri*

Key B. (We have been informed of dioecious *C. nigricans* populations in Montana; they cannot be identified using this key.)

Key C3, p. 46.

3a and 3b. Remove reference to the sheath of the lowest inflorescence bract; we find that *C. pellita* can occasionally have such sheaths that are as much as 10 mm long.

Key E, p. 46

2a. Pistillate scales with a prominent scabrous awn often as long as the scale body or longer

2b. Pistillate scales awnless, acute to acuminate (or rarely with a smooth-sided awn or some scales with a short, inconspicuous, scabrous awn much shorter than the scale)

Key F4, p. 49.

2a. Spikes 3 – 20+ cm long, drooping; plants 90 – 200+ cm tall *C. pendula*

2b. Spikes 1 – 3 (-4) cm long, erect; plants to 60 cm tall

Key F4, p. 49. *Carex mertensii* may have a long sheath on the lowest inflorescence bract. Therefore, modify Key F4 (page 49) as follows:

6a. Perigynia strongly flattened, ovate, AND much larger than the achene; terminal spike gynecandrous

6.5a. Plant montane; spikes dangling on nodding stalks.....*C. mertensii*

6.5b. Plant alpine or subalpine; spikes ascending to erect, though the entire culm may nod as the perigynia mature..... Key F8, p. 53

6b. Perigynia +/- trigonous, not much larger than the achene; terminal spike staminate or androgynous

Key F6, p. 51.

3.5a. Perigynia flat and much longer and wider than the achenes *C. paysonis*

3.5b. Perigynia not flat, little longer or wider than the achenes

Key F6, p. 51-52. The key leads 11 – 14 can work well, but variation in perigynia may occur in *C. spectabilis* and some northern *C. heteroneura* var. *epapillosa*. Unfortunately, occasional unusual plants cause errors when using all the possible leads we have devised. Therefore, please try these alternatives and let us know which you find most consistently helpful.

Alternative 1 (a great alternative for typical plants, but abnormal plants occur and even normal terminal spikes may be misinterpreted)

11a. Terminal spike typically gynecandrous

12a. Spikes 1 – 6 cm long, drooping, some of them obviously stalked; perigynia ovate to orbicular; habitat from low elevations to montane *C. mertensii*

12b. Spikes 0.7 – 2.7 cm long, ascending (occasionally the lowest drooping), though the entire inflorescence may nod, sessile to short-stalked; perigynia elliptic to ovate; habitat alpine or subalpine Key F8, p. 53

11b. Terminal spike typically staminate or androgynous

13a. Perigynia narrower, up to about half as wide as long, with prominent ribs, these marginal or rarely inframarginal instead of truly marginal *C. spectabilis*

13a. Perigynia wider, well over half as wide as long, the ribs distinctly inframarginal on the dorsal side, the true margins thin and veinless *C. paysonis*

Alternative 2

11a. Perigynia ovate, well over half as wide as long

12a. Ribs of perigynia displaced from the margins

13a. Spikes 2 – 4, erect; habitat subalpine and alpine meadows *C. paysonis*

13b. Spikes 4 – 6 (-9), drooping gracefully; habitat lowland to montane meadows and forest edges *C. mertensii*

12b. Ribs of perigynia at the margins Key F8, p. 53

11b. Perigynia elliptical, up to or about half as wide as long

14a. Terminal spike staminate; inflorescence looser, the lower spikes usually stalked and somewhat drooping *C. spectabilis*

14b. Terminal spike gynecandrous; inflorescence dense, the lower spikes usually short-stalked and ascending although the entire heavy inflorescence may cause the entire culm to arch downward *C. heteroneura* var. *epapillosa*

Key G3, p. 55.

6a. Habitat mostly coastal wetlands and ditches (rarely introduced inland); pistillate spikes 4 – 6+ mm wide, crowded, the lower ones much longer than the internodes between them *C. l.* var. *limnophila*

6b. Habitat mostly in or east of the Cascades; pistillate spikes 1 – 4 (-5) mm wide, less crowded

Key I, p. 63.

15a. Perigynium beaks serrulate on margins

15.5a. Inflorescence green to tan, perigynia +/- spreading when ripe, exposed by pistillate scales, 2 – 3 (-3.5) mm long, 1.2 – 1.5 mm long *C. arcta*

15.5b. Inflorescence brown (with green when young), perigynia appressed, +/- hidden by pistillate scales, 3.5 – 4.2 mm long, 1 – 1.2 mm wide *C. leporinella*

15b. Perigynium beaks smooth on margins

Key I1, p. 64.

4a. Inflorescence blackish brown and green, the base usually +/- truncate; perigynium wings absent *C. illota*

4b. Inflorescence brown or brown and green, the base usually +/- tapering; perigynium wings very narrow (0.05 – 0.2 mm wide) *C. integra*

Key I2. (In this key, beak length should be measured as the distance from achene top to beak tip.) Caution: perigynium beaks mature before perigynium bodies, so plants with immature perigynia are likely to be misidentified.

Key J, p. 65.

Lead 6: plants with green perigynia but brown or blackish scales should be sought under lead 6a (in Key J5).

Key J2, J5, J6, pp. 66-69. Plants that key to *C. harfordii* in our key are *C. subbracteata*. Apparently *Carex harfordii* does not occur in Washington or Oregon but *C. subbracteata* occurs near the coast in both states, and as far east as Jackson County in Oregon. Stay tuned for more information.

Key J3, p. 66.

2a. Spikes strongly overlapping (overlapping for much of their length), usually tapered at both ends; perigynium usually wider in the body than the beak, though perhaps not much wider *C. tribuloides* var. *tribuloides*

2b. Spikes more spread out (the lower ones not or slightly overlapping), subglobose; perigynium as wide (or wider) in the lower half of the beak as in the body *C. projecta*

Key J5, p. 67-68

7a. Perigynium beak winged to the tip, or with very short (< 0.4 mm long) unwinged, brown, and parallel-sided tip

7b. Perigynium beak with long (at least 0.4 mm long) unwinged, brown, and parallel-sided tip